U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA NUMBER: DOI-BLM-CO-N010-2011-0073-EA

CASEFILE/ALLOTMENT NUMBER: 0504432/04609 ; 0501042/04529

PROJECT NAME: Permit renewal of the grazing preference on the Lower Milk Creek Allotment #04609 and the Lower Taylor Creek Allotment #4529.

LEGAL DESCRIPTION: See map Attachment #1.

Lower Milk Creek Allotment #04609 T4N R93W parts of Sec. 24-27, 34-36
T4N R92W part of Sec. 31
T3N R92W parts of Sec. 4-6, 8-9, 16-17

3,702 acres	Private
634 acres	State LB
2,643 acres	BLM
6,979 acres	**Total**

Lower Taylor Creek Allotment #4529 T4N R93W parts of Sec. 22-23, 26-28, 34

374 acres	Private
388 acres	BLM
762 acres	**Total**

APPLICANT: White River Ranch Properties, LLLP and JHL Limited Partnership

PLAN CONFORMANCE REVIEW:

Name of Plan: Little Snake Resource Management Plan and Record of Decision approved April 26, 1989.

Results: The proposed grazing permit would be located within the Eastern Yampa River Management Unit #1. The management objectives for this unit are to realize the potential for the development of coal, oil and gas resources. The proposed action also implements the RMP Livestock Grazing Management Objectives to improve the rangeland forage resource by managing toward a desired plant community through proper livestock

management, proper utilization of key forage plants, and selected range improvement practices.

Decision Number/page: pages 10, 11, 37, 38

The proposed action was reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

NEED FOR PROPOSED ACTION: The grazing authorization # 0501042, authorizing grazing on the Lower Milk Creek Allotment #04609 and the Lower Taylor Creek Allotment #04529, held by JHL Limited Partnership expired 2/28/2009. The grazing permit was extended under the appropriations act (P.L. 108-108) through 02/28/2012. Additionally, White River Ranch Properties has applied for the grazing preference on the Lower Milk Creek Allotment #04609 based on the lease of the base property associated with the allotment (DOI-BLM-CO-N010-2011-0098-CX). This grazing permit is subject to renewal at the discretion of the Secretary of the Interior, who delegated the authority to BLM, for a period of up to ten years. The U.S. Bureau of Land Management has the authority to renew the livestock grazing permit/lease consistent with the provisions of the *Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act,* and Little Snake Field Office's *Resource Management Plan/Environmental Impact Statement.* This Plan/EIS has been amended by *Standards for Public Land Health in the State of Colorado.*

The following Environmental Assessment (EA) will analyze the impacts of livestock grazing on public land managed by the BLM. The analysis will recommend terms and conditions to the permit/lease which improve or maintain public land health. The Proposed Action will be assessed for meeting land health standards.

In order to graze livestock on public land, the livestock producer (permittee/lessee) must hold a grazing permit/lease. The grazing permittee has a preference right to receive the permit if grazing is to occur. The land use plan allows grazing to occur on these parcels. This EA will be a site specific look to determine if grazing should be authorized as provided for in the land use plan and to identify the conditions under which it can be permitted.

PUBLIC SCOPING PROCESS: The BLM Little Snake Field Office sent out a Notice of Public Scoping on December 17, 2007 to determine the level of public interest, concern, and resource conditions on the grazing authorizations that were up for renewal in FY 2009. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on permit/lease renewals. Individual letters were sent to the effected permittees/lessees, informing them their permit/lease was up for renewal and requesting any information they wanted included in or taken into consideration during the renewal process.

No comments were received from the public scoping process.

BACKGROUND: These allotments are located approximately 25 miles south of Craig, CO near the historic community of Axial, CO along Colorado State Highway 13. Elevation within

the allotments ranges from 6,300 to 8,100 feet. Runoff from the allotments drains into Milk Creek and Good Spring Creek. These allotments have been grazed by cattle since the mid 1950s. In recent years the grazing on the allotments has been subleased with the base property owner retaining a very active role in coordinating the management and planning of the BLM and private lands. For the past ~10 years the permittee has managed the private lands and associated allotments on a grazing rotation system incorporating each of the 4 pastures on the southwest side of the highway.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Alternative A - Proposed Action

Renew the grazing permit on the Lower Milk Creek Allotment #04609 issued to White River Ranch Properties, LLLP concurrent with the transfer of the grazing preference (DOI-BLM-CO-N010-2011-0098-CX). The permit would be renewed through July 15, 2016 concurrent with the lease of the base property.

The Percent Public Land would be adjusted for the Lower Milk Creek Allotment based on range site data descriptions and topography data.

The terms and conditions of the permit would be as follows:

From:

Allotment	Livestock	Dates			
Name & Number	Number & Kind	From	To	%PL	AUMs
Lower Milk Creek #04609	296 Cattle	05/01	10/15	31	508

To:

Allotment	Livestock	Dates			
Name & Number	Number & Kind	From	To	%PL	AUMs
Lower Milk Creek #04609	343 Cattle	05/01	10/20	26	507
				Unscheduled	1
				Total	508

Special Terms and Conditions:

1. The permittee will be allowed 7 days flexibility on use dates so long as total AUMs are not exceeded.
2. The Lower Pasture and the Houston Meadows Pasture will not exceed 60 consecutive days of livestock grazing.
3. In the Lower Pasture and Axial Pasture where sage-grouse nesting site potential is good, ecological site characteristics are conducive, and species composition allow, maintain 10-20% canopy cover of herbaceous vegetation and maintain residual grass height of 7 inches or greater.

The permit would also be subject to the Standard and Common Terms and Conditions (Attachment #2).

Renew the grazing permit #0501042 on the Lower Taylor Creek Allotment #04529, to JHL Partnership, through May 1, 2014 concurrent with the lease of the base property from Colowyo Coal Company L.P. The grazing permit would be renewed as follows:

From:

Allotment Name & Number	Livestock Number & Kind	Dates From	To	%PL	AUMs
Lower Taylor Creek #04529	6 Cattle	05/01	09/15	100	27

To:

Allotment Name & Number	Livestock Number & Kind	Dates From	To	%PL	AUMs
Lower Taylor Creek #04529	5 Cattle	05/01	10/14	100	27

Special Terms and Conditions:

1. The permittee will be allowed 7 days flexibility on use dates so long as AUMs are not exceeded.
2. Within the Lower Taylor Creek Allotment where sage-grouse nesting site potential is good, ecological site characteristics are conducive, and species composition allow, maintain 10-20% canopy cover of herbaceous vegetation and maintain residual grass height of 7 inches or greater.

The permit would also be subject to the Standard and Common Terms and Conditions (Attachment #2).

Range Improvements:

Wildlife Planting

A wildlife planting would be established in the Devil's Hole pasture within the Lower Milk Creek Allotment located in T3N, R92W Sec. 9 on the BLM parcel (also see map Attachment #1). This planting would provide improved upland habitat for sharp tail and greater sage grouse. Application would consist of small areas of dispersed seedings totaling about 20 acres. A similar planting was completed in fall of 2010 on private land within the same section. The primary plant species in the mix would be legumes combined with 5-6 grasses or forbs. Table 1 below shows the seed mix that would be used. All seed would be certified weed free. Seed would be applied using a broadcast seeder mounted on an ATV. This project has been coordinated with the Colorado Division of Wildlife, the U.S. Fish and Wildlife Service and the Natural Resource Conservation Service.

Table 1.			
Species	**Application Rate (PLS lbs/acre)**	**Project Acres**	**Seed lbs for Project**
Utah Sweetvetch	1.00	20	20
Lewis Flax	0.15	20	3
Total			23
Additional potential interseed species:			
Grasses:		**Forbs:**	
Western Wheatgrass		Western Yarrow	
Streambank Wheatgrass		Arrowleaf Balsamroot	
Bluebunch Wheatgrass		*Erigonium* spp (buckwheat)	
Slender Wheatgrass		*Lomatium* spp (wild parsley)	
Prairie Junegrass			

Wildlife Planting Stipulations

1. No hazardous materials/hazardous waste or trash shall be disposed of on public lands. If a release does occur, it shall be reported to the Little Snake Field Office immediately at 970-826-5000.
2. No seeding activities may occur between March 1 and August 15 to prevent disruption of nesting sage grouse and migratory bird species.
3. A Cooperative Agreement form 4120-6 will be signed and in place prior to project implementation.

Ponds

Two small ponds would be constructed, one within each allotment. The locations are shown on Attachment #1. The Lower Milk Creek Allotment pond would be constructed within the Devil's Hole pasture to provide an additional source of water for livestock and wildlife. The pond location would be ~3/4 mile from another reliable water source. This pond would provide an additional upland water source in an area that sees minimal utilization as a result of distance from water. This would further distribute wildlife and livestock grazing within the pasture. This project coordinates with the permittee's conservation efforts and grazing management plan that incorporates private lands.

The Lower Taylor Creek pond would provide an additional source of water for both wildlife and livestock. The two primary water sites for wildlife are creeks that run adjacent to the allotment. This requires wildlife to cross Colorado State Highway 13 or to traverse the adjacent coal mining operation facilities and haul road. This pond would provide an alternative upland site for water.

These ponds would be constructed to retain seasonal runoff and snow melt. Construction would consist of mechanical clearing of brush, core trenching of the dam site, and the construction of an earthen dam and water retention pit by dozer. The dam would not exceed 15 feet in height from the bottom of the embankment to the bottom of the spillway and the development would retain

less than 0.5 acre-feet. The spillways would have a minimum of 4-feet freeboard to direct any spillage towards the embankment. The pits would be lined with bentonite to improve water retention. The proposed ponds would involve a direct surface disturbance of ~ 2 acres for construction, but more typically, total direct surface disturbance would be 1 acre or less. Attachment #3 provides further construction specifications.

Pond Construction Stipulations

1. Access to and from the site will be on existing roads or trails. Where cross-country travel is mandatory, the same tracks will be used in and out. While traveling, the dozer blade will be kept up.
2. Top soil will be stockpiled and used to cover the disturbed area to the greatest extent possible.
3. Noxious weeds will be controlled by the permittee on any area disturbed as a result of these projects. Any spraying of weeds will need to be cleared through BLM prior to spraying.
4. No hazardous materials/hazardous waste or trash shall be disposed of on public lands. If a release does occur, it shall be reported to the Little Snake Field Office immediately at 970-826-5000.
5. Any surface disturbance will be reseeded with native species adapted to the area.
6. No construction may occur between March 1 and August 15 to prevent disruption of nesting sage grouse and migratory bird species.
7. All range improvement projects located on BLM land will have cultural resource studies completed to fulfill BLM's responsibilities under Section 106 of the National Historic Preservation Act.
8. Construction operations would cease immediately and the Field Office Manager would be notified immediately upon discovery of a fossil during construction activities. An assessment of the significance would be made and a plan to retrieve the fossil or the information from the fossil would be developed.
9. Powerline rights-of-way are within the Lower Taylor Creek project area. Avoid existing rights-of-way during project activities. Utilize the "One Call" system to locate and stake the centerline and limits of all underground facilities in the area prior to project initiation. Provide 48-hour notice to the owner/operator of all facilities prior to performing any work near existing rights-of-way.
10. A Cooperative Agreement form 4120-6 will be signed and in place prior to project construction.

Alternative B - No Action Alternative (continue previous authorized use)

Under this alternative the grazing permit would be renewed with no modifications to the terms and conditions and no new range improvements would be installed.

The grazing permit on the Lower Milk Creek Allotment #04609 would be renewed to White River Ranch Properties, LLLP through July 15, 2016 concurrent with the lease of the base property. The terms and conditions of the permit would be as follows:

Allotment Name & Number	Livestock Number & Kind	Dates From	To	%PL	AUMs
Lower Milk Creek #04609	296 Cattle	05/01	10/15	31	508

The grazing permit on the Lower Taylor Creek Allotment #04529 would be renewed to JHL Partnership, through May 1, 2014 concurrent with the lease of the base property from Colowyo Coal Company L.P. The grazing permit would be renewed as follows:

Allotment Name & Number	Livestock Number & Kind	Dates From	To	%PL	AUMs
Lower Taylor Creek #04529	6 Cattle	05/01	09/15	100	27

Alternative C - No Renewal Alternative
The application for renewal of the grazing authorization on both allotments would be denied. As a result, livestock grazing would not be authorized on public lands within the Lower Milk Creek Allotment and the Lower Taylor Creek Allotment. The BLM would initiate a process in accordance with the 43 CFR 4110.3 regulations to remove authorized grazing on these parcels. No new range improvement projects would be implemented.

Alternatives Considered but not Analyzed
NEPA requires federal agencies to rigorously explore and evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating alternatives that were not developed in detail (40 CFR 1502.14). As also required by NEPA, the range of alternatives considered in detail includes only those alternative that would fulfill the purpose and need for the proposed action.

Reduced Grazing Alternative
A reduction in authorized grazing for the 27 AUMs in the Lower Taylor Creek Allotment #04529 attached to the Colowyo Coal Company base property and the 508 AUMs in the Lower Milk Creek Allotment #04609 attached to the JHL Limited Partnership base property would take place under this alternative.

This alternative is eliminated from detailed study because land health standards are being met for both allotments. Additionally, a reduction in grazing is not analyzed because no new issues or concerns have been identified that would require this action.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

For the following resources and issues, those brought forward for analysis will be addressed below.

Resource/Issue	N/A or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Air Quality			X
Areas of Critical Environmental Concern	X		
Cultural Resources			X
Environmental Justice/ Socio-Economics			X
Flood Plains		X	
Fluid Minerals	X		
Forest Management	X		
Hydrology/Ground		X	
Hydrology/Surface			See Surface Water Quality
Invasive/Non-Native Species			X
Migratory Birds			X
Native American Religious Concerns			X
Paleontology			X
Prime and Unique Farmland		X	
Range Management		X	
Realty Authorizations			X
Recreation/Transportation		X	
Soils			X
Solid Minerals		X	
T&E and Sensitive Animals			X
T&E and Sensitive Plants		X	
Upland Vegetation			X
Visual Resources	X		
Waste, Hazardous or Solid		X	
Water Quality - Ground		X	
Water Quality - Surface			X
Wetlands/Riparian Zones			X
Wild and Scenic Rivers	X		
Wild Horse & Burro Mgmt	X		
Wilderness Characteristics/WSA's	X		
Wildlife - Aquatic			X
Wildlife - Terrestrial			X

Unless otherwise described no additional mitigative measures apply to the resource concerns.

AIR QUALITY

Affected Environment: There are five Federal Class I areas within 100 kilometers or adjacent to the Little Snake Field Office (LSFO) boundary, all of which occur in Colorado. The Class I areas are Rocky Mountain National Park and the Mount Zirkel, Flat Tops, Rawah, and Eagles Nest Wilderness areas. There are no federal Class I areas in Utah or Wyoming within 100 km of the LSFO boundary. There are no non-attainment areas nearby that would be effected by any alternative.

Environmental Consequences, Alternative A – Proposed Action and Alternative B – No Action Alternative: Activities associated with grazing that may effect air quality, namely dust and exhaust from ranch operation vehicles as well as dust from livestock hoof action, fall below EPA emission standards for the six criteria pollutants of concern (sulfur dioxide, nitrogen oxide, ground-level ozone, carbon monoxide, particulate matter [both PM2.5 and PM10], and lead). Furthermore, ranch operation and livestock activities are not a significant source of these pollutant emissions that do occur in Moffat County. Impacts to air quality caused by the grazing alternatives are therefore considered negligible.

Environmental Consequences, Alternative C - No Renewal Alternative: Impacts to air quality eliminated by this alternative are considered negligible, thus impacts to air quality as a result of eliminating grazing are also considered negligible.

Source: United States Environmental Protection Agency National Ambient Air Quality Standards: http://www.epa.gov/air/criteria.html

CULTURAL RESOURCES

Affected Environment: Grazing authorization renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment was completed for each allotment by Ethan Morton, Little Snake Field Office Archaeologist, on May 2, 2011 (Morton 2011). The assessment followed the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM-CO-01-026. The results of the assessment are summarized in the table below. Copies of the cultural resource assessments are in the field office archaeology files.

Data developed here were taken from the cultural program project report files, site report files, and base maps kept at the Little Snake Field Office as well as from General Land Office (GLO) maps, BLM land patent records, An Overview of Prehistoric Cultural Resources Little Snake Resource Area, Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, and An Isolated Empire, A History of Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and Appendix 21 of the Little Snake Resource Management Plan and Environmental Impact Statement, Draft February 1986, Bureau of Land Management, Craig, Colorado District, Little Snake Resource Area.

The table below is based on the allotment specific analysis. The table shows known cultural

resources, eligible and need data, and those that are anticipated to be in each allotment.

Allotment Number	Acres Surveyed at a Class III Level	Acres NOT Surveyed at a Class III Level	Percent of Allotment Inventoried at a Class III Level	Eligible or Need Data Sites-Known in Allotment	Estimated Sites for the Allotment *(total number)	Estimated Eligible or Need Data Sites in the Allotment (number)
04609/Lower Milk Creek	220	2423	8%	8	96	24
04529/Lower Taylor Creek	199	388	51%	1	2	1

*Estimates of site densities are based on known inventory data. Estimates should be accepted as minimum figures which may be revised upwards or downwards based on future inventory findings.

Lower Milk Creek Allotment #04609
In the Lower Milk Creek Allotment #04609, nine cultural resource inventories have been conducted resulting in the total survey coverage of 220 acres at a Class III level. This is approximately 8 percent of the BLM administered lands within the allotment. These studies resulted in the discovery of one historic site. The site is the historic alignment of Colorado State Highway 13 (5MF.5138). Segments of this highway have been recommended as eligible for the National Register. This route is also documented on the 1885 GLO plat as a "road" and on the 1906 plat as the "Wagon Road Meeker to Axial". Four additional potential unrecorded historic resources were identified on the plats. These resources include a telegraph line depicted on the 1885 GLO plat, and an irrigation ditch, fence, and area of "blazed ceder" depicted on the 1906 GLO plat.

Based on the available data (site density) there are potentially 96 cultural resources within the allotment. It is likely that approximately 24 of these resources will be eligible for the National Register. Subsequent cultural resource inventory will be conducted in areas where livestock concentrate within ten years of issuance of a permit. This subsequent inventory will consist of approximately 130 and involve the evaluation of State Highway 13 and the potential historic sites identified on the GLO plats. If historic properties are located during the subsequent field inventory, and BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer.

Lower Taylor Creek Allotment #04529
In the Lower Taylor Creek Allotment #04529, 7 cultural resource inventories have been conducted resulting in the total survey coverage of 199 acres at a Class III level. This is approximately 51 percent of the BLM administered lands within the allotment. These studies resulted in the discovery of a prehistoric open campsite (5MF.2662). The site has been officially determined not eligible for the National Register. No potential unrecorded historic resources were identified on the GLO plats.

Based on the available data (site density) there are potentially 2 cultural resources within the allotment. It is likely that approximately 1 of these resources will be eligible for the National Register. Subsequent cultural resource inventory will be conducted in areas where livestock concentrate within ten years of issuance of a permit. This subsequent inventory will consist of approximately 25 acres. If cultural resources eligible for the National Register are located during subsequent field inventory mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer.

Environmental Consequences, Alternative A – Proposed Action and Alternative B – No Action Alternative: The direct impacts that occur where livestock concentrate, during normal livestock grazing activity, include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art (Broadhead 2001, Osbourn et al. 1987). Indirect impacts include soil erosion, gullying, and increased potential for unlawful collection and vandalism. Continued livestock use in these concentration areas may cause substantial ground disturbance and cause irreversible adverse effects to historic properties. Placement of mineral supplements, which can create concentration areas, would potentially impact historic properties if they are in proximity of the placement. Continued livestock management under the proposed action is appropriate, as long as new discovery's of cultural resources are properly mitigated if grazing impacts are occurring.

Standard Stipulations for cultural resources are included in Standard and Common Terms and Conditions (Attachment #2).

Environmental Consequences, Alternative C - No Renewal Alternative: While a no grazing alternative alleviates potential damage from livestock activities, cultural resources are constantly being subjected to site formation processes or events after creation (Binford 1981, Schiffer 1987). These processes can be both cultural and natural and take place in an instant or over thousands of years. Cultural processes include any activities directly or indirectly caused by humans. Natural processes include chemical, physical, and biological processes of the natural environment that impinge and or modify cultural materials. Sites which have been determined eligible for the National Register and are threatened may have to be mitigated.

References:

Binford, Lewis R.
1981 Behavioral archaeology and the "Pompeii Premise". *Journal of Anthropological Research* 37(3):195-208.

Broadhead, Wade
2001 *Brief Synopsis of Experiments Concerning Effects of Grazing on Archaeological Sites*. Ms. on file, Bureau of Land Management, Gunnison Field Office, Gunnison, Colorado.

Morton, Ethan
2011 *EA input for the Grazing Lease Renewal on the Lower Milk Creek Allotment #04609*

and Lower Taylor Creek Allotment #04529. DOI-BLM-CO-N010-2011-0073-EA. Ms on file. BLM-LSFO 10.29.2011. Craig Colorado.

Parks, Erin

2010 *EA input for the Implementation of the Peroulis Grazing Plan*. DOI-BLM-CO-N010-2010-0033-EA. Ms on file. BLM-LSFO. 10.20.2010 Craig Colorado

Osbourn, Alan, Susan Vetter, Ralph Hartley , Laurie Walsh, Jesslyn Brown

1987 *Impacts of Domestic Livestock Grazing in the Archaeological Resources of Capitol Reef National Park, Utah*. *Occasional Studies in Anthropology No. 20.* Ms. on file, Midwest Archaeological Center, Lincoln, Nebraska.

Schiffer, Michael B.

1987 *Formation Processes of the Archaeological Record*]Formation Processes of the Archaeological Record. Albuquerque: University of New Mexico Press.

ENVIRONMENTAL JUSTICE and SOCIOECONOMICS

Affected Environment: Federal agencies are required to assess projects to ensure there is no disproportionately high or adverse environmental, health, or safety effects on minority and low-income populations. Minorities comprise a small proportion of the population residing inside the boundaries of the Little Snake Field Office.

Agricultural practices, energy exploration and development, and hunting are the main economic activities of the area. In this region, livestock operations and public land management are strongly linked through grazing permits.

Environmental Consequences, Alternative A – Proposed Action and Alternative B – No Action Alternative: Minority or low- income populations seeking employment in the ranching industry would be beneficially effected due to employment opportunities related to these alternatives, indirect benefits to the surrounding economy would occur due to overall employment opportunities related to the ranching service support industry in the region as well as the economic benefits to state and county governments related to taxes. Grazing operations would continue to supply personal income to the operator and employees, and would have a proportional influence on the regional, Colorado, and national economy.

Grazing activities may impact other public land users and nearby residents, but the impact is not considered substantial at this time due to the intermittent nature of the presence of sheep and cattle. These alternatives would not generate high levels of concern, opposition, or dissatisfaction among local residents and would not adversely effect the environment, health, or safety of minority and low-income populations.

Environmental Consequences, Alternative C - No Renewal Alternative: If the No Renewal Alternative were to be chosen, canceling the grazing preference for these allotments, this would have a negative economic impact on minority or low-income populations who could lose employment due to this action. The indirect effects would include negative effects due to overall employment opportunities related to the ranching service support industry in

the region. A loss of the grazing permit on the allotment would reduce the profitability of the ranch, reducing economic benefits to state and county governments related to taxes.The No Renewal Alternative could generate high levels of concern, opposition, or dissatisfaction among local residents, but would not adversely effect the environment, health, or safety of minority and low-income populations.

INVASIVE/NON-NATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the area of the proposed action. Canada thistle, hound's tongue, hoary cress (whitetop), several species of biennial thistles, Dalmatian toadflax, downy brome, leafy spurge and knapweeds are known to occur in or near this area. Other species of noxious weeds could be introduced by vehicle traffic, livestock, wildlife and other means of dispersal. Principals of Integrated Pest Management (IPM) are employed to control noxious weeds on BLM lands in the Little Snake Field Office.

Environmental Consequences, All Alternatives: The impact of invasive or noxious weed establishment is very similar under all alternatives. Vehicular access to public lands for dispersed recreation, hunting, grazing operations, livestock and wildlife movement, as well as wind and water, can cause weeds to spread into new areas. Surface disturbance from livestock concentration and human activities associated with grazing operations or recreation use can also increase weed presence. The largest concern in the allotment would be for biennial and perennial noxious weed infestations to establish and not be detected. Once an infestation is detected it could be controlled with various IPM techniques. Land practices and land uses by the livestock operator, adjacent private landowners and their weed control efforts and awareness would largely determine the identification and potential infestations of weeds within the allotment.

Environmental Consequences, Alternative A - Proposed Action: The proposed ponds and wildlife plantings included in this alternative provide a disturbance opportunity for invasive species to establish. Permittee awareness of pre-construction weed species presence as well as post construction monitoring of weed species would assist in treatment of potential infestations associated with the proposed project. Revegetation of any disturbed areas would be expected in 2-3 years reducing the potential for weed establishment. Weed free seed used in the wildlife planting reduces potential for introduction of new weed species at these sites.

MIGRATORY BIRDS

Affected Environment: Plant communities on the allotments are largely comprised of sagebrush with a healthy understory of grasses and forbs. Juniper and some cedar trees are intermixed within the sagebrush shrubland throughout both allotments. A variety of migratory birds utilize this habitat during the nesting period (May through July) or during spring and fall migrations. The allotments contain potential nesting and/or foraging habitat for the following United States Fish & Wildlife Service (USFWS) 2008 Birds of Conservation Concern: Brewer's sparrow, sage sparrow, sage thrasher, bald eagle, and loggerhead shrike. There are also over twelve historic golden eagle nest sites throughout the allotments.

Environmental Consequences, Alternative A – Proposed Action and Alternative B – No Action Alternative: While livestock grazing can directly impact reproductive success of migratory songbirds by trampling of nests, it is more likely that it indirectly influences

reproductive success due to changes in vegetation such as species composition, plant height or cover. Terms and conditions which limit utilization levels to 50% on key grass species and to 40% on key browse species would prevent over-utilization (>60%) in any given area. Pond construction stipulations would restrict construction to occur outside of migratory bird nesting periods. Due to the above measures, grazing would not alter habitat conditions to the extent that reproduction or foraging would be adversely impacted. Golden Eagle nesting and fledgling activities would not be disturbed by livestock grazing. The vegetative community is in good condition, providing suitable habitat for migratory bird species. These conditions would continue under both alternatives and would be compatible with maintaining local migratory bird populations.

Environmental Consequences, Alternative C - No Renewal Alternative: Elimination of grazing would directly and indirectly impact migratory birds and their habitat. Cessation of cattle grazing would eliminate nest loss and potential mortality of migratory birds through grazing and grazing-related activities. The no grazing alternative would have either a beneficial or detrimental effect on individual migratory bird species, depending on the response of range condition and individual species requirements, but effects at the population or species level would not be adverse.

NATIVE AMERICAN RELIGIOUS CONCERNS

Letters were sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Utes Tribal Council, Shoshoni Tribal Historic Preservation Officer, and the Colorado Commission of Indian Affairs discussing upcoming projects the BLM would be working on. Letters were followed up with phone calls. No comments were received (Letters on file at the Little Snake Field Office, Craig, Colorado).

PALEONTOLOGY

Affected Environment: The geologic formation at the surface is the Cretaceous age Williams Fork Formation, a member of the Mesa Verde Group (Kw). Thickness is 1,100-2,000 feet. This has been classified a Class Ia formation for the potential for occurrence of scientifically significant fossils.

Environmental Consequences, Alternative A - Proposed Action: Scientifically significant fossils are found abundantly within this formation (Armstrong & Wolney, 1989). The potential for discovery of significant fossils on this location is considered to be high. If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil. The proposed action could also constitute a beneficial impact to paleontological resources by increasing the chances for discovery of scientifically significant fossils. The proposed action constitutes limited surface disturbance so as to make discovery of fossils by surface survey unlikely.

Environmental Consequences, Alternative B - No Action and Alternative C - No Renewal: Under these alternatives there would be no effect to paleontological resources.

References:

Armstrong, Harley J. and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bur. Land Management, Vol. I of V.

Miller, A.E., 1977, Geology of Moffat County, Colorado, Colo. Geol. Surv. Map Series 3, 1:126,720.

REALTY AUTHORIZATIONS

Affected Environment: The proposed Lower Taylor Creek pond project is in an area where two powerline rights-of-way are authorized.

Environmental Consequences, Alternative A – Proposed Action: Existing authorized right-of way facilities could be accidentally damaged during seeding and/or pond construction project activities. Impacts would be temporary until any damage is repaired.

Environmental Consequences, Alternative B – No Action and Alternative C – No Renewal: Under these alternatives there would be no new impacts to Realty Authorizations.

SOILS

Affected Environment: The table below (Table 1) describes the major soil groups (over 400 acres) included within the Lower Milk Creek and Lower Taylor Creek Allotments. Surface soil characteristics for both allotments are relatively stable with good vegetation diversity and cover to help protect from accelerated erosion. All standards for soil health are met for both allotments, though there is evidence of slight erosion in the form of litter and soil movement as well as pedestalling in the Lower Milk Creek allotment. Given the steep nature of the topography in the area, the main hazard for most soils in the allotments is erosion unless close-growing plant cover is maintained. Little livestock use occurs on federally-managed portions of the Devil's Hole pasture of the Lower Milk Creek allotment due to the steep nature of the topography. Biological soil crusts are present where appropriate and intact.

Table 1. Soil Summary - Lower Milk Crk (#4609) & Lower Taylor Crk (#4529) Allotments

Soil Map Unit (MU) & Soil Name (Acres in Allot.)	Map Unit Setting	Description
MU 197 Torriorthents-Rock outcrop, sandstone complex , 25 to 75% slopes *2,114 acres*	*Elevation:* 6,000 - 11,280 feet *Mean annual precipitation:* 9-16" *Ecological Site:* not given	These backslope soils are well drained with moderate permeability and very high runoff potential. Available water capacity is very low and the soil profile is typically 0-18" deep, composed mostly of channery sandy loam and channery clay loam down to bedrock.
MU 206 Ustorthents, frigid-Borolls complex, 25 to 75% slopes *823 acres*	*Elevation:* 7,000 – 8,500 feet *Mean annual precipitation:* 16-20" *Ecological Site:* not given	These foot and backslope soils are well drained with moderate to moderately slow permeability and high to very high runoff potential. Available water capacity is low to very low and the soil profile is typically up to 34 inches deep, composed mostly of loam, very channery sandy loam and cobbly sandy clay loam to bedrock.
MU 26 Campspass fine sandy loam, 12 to 25% slopes *561 acres*	*Elevation:* 6,800 – 7,600 feet *Mean annual precipitation:* 16-18" *Ecological Site:* Clayey Foothills	These mountainside soils are well drained with slow permeability and high runoff potential. Available water capacity is high and the soil profile can be up to 60 inches deep, composed mostly of clay loam and loam.
MU 108 Jerry-Cochetopa complex, 5 to 35% slopes *528 acres*	*Elevation:* 7,200 to 8,600 feet *Mean annual precipitation:* 18 to 20" *Ecological Site:* Brushy Loam	These mountainside soils are well drained with slow to very slow permeability and very high runoff potential. Available water capacity is high and the soil profile is typically up to 60 inches deep, composed mostly of loam, clay loam, and silty loam.
MU 142 Nortez, cool-Morapos complex, 12 to 25% slopes *405 acres*	*Elevation:* 6,400 – 7,600 feet *Mean annual precipitation:* 16-18" *Ecological Site:* Mountain Loam	These mountainside soils are well drained with slow permeability and very high runoff potential. Available water capacity is highly variable and the soil profile is typically 34 to 60 inches deep, composed mainly of loam and clay loam.

Data taken from *Soil Survey of Moffat County Area, Colorado (2004).*

Environmental Consequences, Alternative A - Proposed Action and Alternative B -No Action Alternative: Soils within the allotments are mostly loam and clay-based, which are least less susceptible to damage and compaction when dry (late spring through early fall). Both the existing and proposed grazing periods (May 1 – October 15) coincide with the driest time of year for the area, which is most preferable given the predominant soil types. Even though the season of potential use is long, existing cross-fencing and water developments (both existing and proposed) within the allotments accommodates flexibility in rotational grazing between and among years of use so that no one pasture has to be used for the entire season or the same season annually. Given the good condition of the upland vegetation within the allotments both alternatives would continue to maintain sufficient plant cover to protect the soil surface from

wind and water erosion and allow the plant community to continue to produce litter in sufficient amounts to maintain litter and sustain appropriate water permeability.

Environmental Consequences, Alternative C - No Renewal Alternative: Removal of livestock from public lands would lead to decreased hoof compaction of soil surfaces, especially in riparian areas where livestock tend to congregate, particularly during the summer and in steep areas. Over time the lack of compaction, combined with the annual freeze-thaw cycle, may lead to a decrease in soil bulk density and improved soil moisture conditions, which facilitates vegetation germination and root development. Removing livestock would also result in an increase of both plant litter and live vegetative ground cover that would provide more protection from wind and water erosion. Livestock trails and the resulting erosion would recede over time.

If grazing were to continue on adjacent private or other non-federal lands in the allotment, fences would have to be built by the landowner(s) to prevent trespass onto federally-managed lands. Given the natural tendency of cattle to congregate and trail along fence lines, it is likely that paths and forage depletion would occur along the fences. The resulting decrease in canopy cover would fail to decrease the impact of raindrops on the soil surface, while the expected increase in compaction would increase runoff from both rain and snowmelt. These factors would combine to increase the likelihood of both wind and water erosion in the areas adjacent to fences. This may result in blowouts and gullies which could indirectly impact federal lands through deposition or by the eroded area actually spreading onto federal lands.

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered species or habitats for such species present within the proposed project area. These allotments do provide breeding and nesting habitat for greater sage-grouse, a BLM special status species and a candidate for listing under ESA. The Lower Milk Creek and Lower Taylor Creek Allotments also provide habitat for the following BLM sensitive species: Columbia sharp-tailed grouse and bald eagle.

There are two greater sage grouse leks within 2 miles from the perimeter of the allotments. The allotment is mapped as overall Greater sage-grouse habitat, Greater sage-grouse winter range and brood rearing area by the Colorado Division of Wildlife. Greater sage-grouse nest habitat is scattered in patches of heavier sagebrush. Quality nesting habitat has an understory of residual grass cover that provides hiding cover for incubating females. Important brood rearing habitat for sage grouse is found along drainages and in moister sites near springs and seeps. Sage grouse broods require high protein forbs and associated invertebrates. Winter habitat for sage grouse overlaps with the big game winter range.

Both allotments are mapped as winter range for the Columbia sharp-tailed grouse by the Colorado Division of Wildlife. Both allotments are also mapped as bald eagle winter range, winter forage and summer forage areas by the Colorado Division of Wildlife.

Environmental Consequences, Alternative A - Proposed Action and Alternative B - No Action Alternative: Livestock grazing has the potential to reduce residual grass cover, an important habitat component for sage-grouse nest concealment. Season long grazing,

concentrated fall grazing or grazing the same areas in the spring and then again in the fall would have the most impacts on residual grass cover since there would be little to no opportunity for re-growth before the nesting season. Special terms and conditions under the proposed action would help protect nesting habitat for greater sage-grouse by ensuring that there will be residual grass cover for nesting. Overall, the proposed action would not degrade greater sage-grouse habitats on the allotments. The proposed wildlife planting would improve upland habitat for Columbia sharp-tailed grouse. The proposed action would not degrade or alter foraging opportunities for bald eagles.

Environmental Consequences, Alternative C - No Renewal Alternative: This alternative would benefit wildlife by reducing and eventually eliminating direct and indirect effects of livestock grazing and associated activities to wildlife. Increases in forage and hiding cover amounts, types, and quality for wildlife would be expected with this option.

Source: Colorado Greater Sage Grouse Conservation Plan:
http://wildlife.state.co.us/WildlifeSpecies/SpeciesOfConcern/Birds/GreaterSagegrouseConservationPlan.htm

UPLAND VEGETATION

Affected Environment: Vegetation within these allotments is very diverse. Plant communities include sagebrush grasslands and dense areas of mountain shrub vegetation. Vegetation is vigorous and productive. The topography in these allotments is varied ranging from creek bottom riparian areas to steep cliffs and rocky terrain.

Environmental Consequences, Alternative A - Proposed Action: The minor changes in dates included in this alternative provide additional flexibility to coordinate vegetation maturity with livestock grazing. The proposed ponds would facilitate increased distribution of livestock across the allotments which would provide more uniform utilization patterns. These additional water sites would also provide for alternatives in the grazing rotation system. The wildlife planting sites would add additional microclimates of desirable native plants that would benefit multiple wildlife species and diversify the upland plant community. Under this alternative there would be benefits to upland vegetation with no adverse effects.

Environmental Consequences, Alternative B - No Action Alternative: Healthy and diverse plant communities would be maintained under this alternative. There would be no adverse effects to upland vegetation. This alternative does not provide for increased flexibility of the grazing system or uniformity of grazing utilization in the Lower Taylor Creek Allotment or the Devil's Hole pasture of the Lower Milk Creek Allotment.

Environmental Consequences, Alternative C - No Renewal Alternative: The elimination of authorized grazing use would result in no adverse impacts to upland vegetation, current conditions would continue. There are currently no degrading upland vegetation resource concerns on the allotment.

WASTE, HAZARDOUS OR SOLID

Affected Environment: There are no hazardous materials present on these allotments.

Environmental Consequences, All Alternatives: Potential releases of hazardous materials could occur due to vehicular access for livestock management operations or recreation traffic. Coolant, oil, and fuel are materials that could potentially be released. Due to the limited amount of vehicular activity that would be required, the potential for releases of any of these materials is low and if a release were to occur, it would be minimal and highly localized and not result in an adverse impacts.

WATER QUALITY – SURFACE

Affected Environment: Surface runoff from the allotments flows primarily into Milk Creek or Good Spring Creek, a tributary of Milk Creek. Water quality for the mainstem of Milk Creek (including all tributaries and wetlands from CR15 to the confluence with the Yampa) must support Aquatic Life Warm 1, Recreation P, Water Supply, and Agricultural uses. The mainstem of Good Spring Creek (above Wilson Reservoir) must support Aquatic Life Warm 2, Recreation P, Water Supply, and Agricultural uses. There are no water quality impairments or suspected water quality issues for waters influenced by the allotments considered in the proposed action.

Environmental Consequences, Alternative A – Proposed Action and Alternative B - No Action Alternatives: Livestock wastes deposited in or near streams or entrained or dissolved in runoff reaching streams may contribute to nutrient (nitrogen, phosphorous) and bacteria (*E. coli*) exceedances in surface waters influenced by grazing allotments, although the source(s) of these pollutants, when present, can be difficult to determine. Livestock use of surface waters may also contribute to increased suspended solids (soil particles, organic matter particles) and increased water temperatures by removing or trampling streamside vegetation when use is concentrated for extended periods of time or during certain times of year.

Water quality in grazing lands is primarily influenced by the duration, amount, and intensity of precipitation and livestock use, and landscape characteristics (topography, soils, vegetative cover). Within the Lower Milk Creek and Lower Taylor Creek allotments, the terrain is steep and the potential for surface water runoff to perennial water bodies is high. Although little is known about the condition of riparian areas within the allotment because they occur on private land, the rotational use of pastures as well as the use of existing and new upland water developments would help to alleviate livestock use of these areas. Upland vegetation on federally-managed portions of the allotments is adequate to help prevent excessive erosion and the potential for sedimentation downstream.

Surface waters present within the allotments are currently supporting classified uses. Permitting livestock grazing as proposed is consistent with land uses throughout the watershed and is not expected to result in changes to water quality. The proposed grazing intensity would not compromise soil stability and vegetation community health given the good condition of the vegetation within the allotments and the rotational use of pastures within the allotments.

Environmental Consequences, Alternative C - No Renewal Alternative: Potential direct and

indirect impacts to water quality caused by livestock use, such as deposition and concentration of waste directly into the water body or trampling, trailing, overgrazing of streamside vegetation that may lead to increased sedimentation, would be eliminated. This alternative has the potential to benefit overall water quality both within and downstream of the allotment(s).

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2010. Regulations #33, 37, and 93. http://www.cdphe.state.co.us/regulations/wqccregs/index.html

Kansas State University Research and Extension. 2002. Kansas Grazing Land Water Quality Program: Understanding Grazing Land and Water Quality (pamphlet). www.kdheks.gov/nps/resources/**grazing**/attach2.pdf

WETLANDS AND RIPARIAN AREAS

Affected Environment: There is a small (0.3 mile) unassessed reach of Wood Gulch, an ephemeral tributary to Milk Creek, that occurs on public lands within the Lower Milk Creek allotment (Devil's Hole pasture). There are no identified wetland or perennial riparian resources present on the federally-managed portions of the two allotments. Portions of Milk Creek and Good Spring Creek (perennial tributaries to the Yampa River) that flow through the allotments are privately managed. As such, little is known about the current functioning condition of these riparian areas. It is not known if wetlands resources are present on the privately held portions of the allotments.

Environmental Consequences, Alternative A – Proposed Action and Alternative B - No Action Alternatives: Livestock use during most of the vegetative growing season (spring through early fall) could lead to concentration in riparian areas and in the stream channel itself, where plant vigor could be reduced and vegetation communities and channel form could change over time. There is also the possibility of adverse effects to aquatic life if damage to herbaceous vegetation leads to a reduction in canopy and in-stream cover that influences water temperature and availability of any preferred bankside habitat. Changes to the channel configuration could increase sediment delivery and alter substrate composition that macroinvertebrates and native fish prefer. Although the annual season of use for both allotments is during the growing season, the pasture rotation schedule as well as the existing and proposed upland water sources on federally managed lands would alleviate grazing pressure on privately managed riparian resources so that portions of the resource would be rested throughout the growing season (especially in the Lower and Houston Meadows pasture where most riparian areas occur) and reduce overall impacts to these resources.

Environmental Consequences, Alternative C - No Renewal Alternative: Removing cattle from the allotment would likely improve riparian and wetland resource conditions over the long-term. A decrease in herbivory on riparian vegetation and trampling pressure caused by livestock in riparian areas would increase soil moisture and reduce the potential for erosion and any associated changes to channel geomorphology and wetland form/function, particularly in low and moderate gradient stream where the presence of riparian vegetation is one of the most important factors in maintaining stability. In ephemeral channels and wetlands, reduced livestock grazing pressure may also maintain or raise seasonal water tables during the dry season to a point where facultative and obligate riparian plant species are able to persist or even expand, thereby further increasing channel stability. However, these benefits may not fully be realized if

the riparian resource is used by wildlife, particularly large ungulates, since wildlife can also have similar impacts to riparian resources, especially during periods of drought. Also, livestock grazing on adjacent private and other non-federal lands would continue to produce direct effects to riparian resources that may indirectly effect riparian resources on federally managed lands further downstream.

WILDLIFE – AQUATIC

Affected Environment: Milk Creek and Good Spring Creek run through the private land within the Lower Milk Creek Allotment. Both Milk Creek and Good Spring Creek support aquatic invertebrates, amphibians, and reptiles. Stream surveys using hoop nets were conducted in 2010 in Milk Creek approximately six miles downstream from the Lower Milk Creek Allotment. Species found during this survey include flannelmouth sucker, considered a BLM sensitive species and a species of concern by the U.S. Fish and Wildlife Service. As a result of these surveys, this stream can be considered an important spawning tributary to the Yampa River for native fish species. Although no inventory data are available for the portion of Milk Creek within the Lower Milk Creek Allotment, these waterways may also support fish populations.

Environmental Consequences, Alternative A – Proposed Action and Alternative B - No Action Alternative: Potential impacts from livestock grazing include trampling of individuals or nests/eggs, water displacement, sedimentation and nitrification and removal or degradation of shading vegetation. There would be no measurable impacts on aquatic wildlife under either alternative. The construction of additional livestock ponds would help decrease and disperse livestock concentrations around riparian areas important for aquatic wildlife.

Environmental Consequences, Alternative C - No Renewal Alternative: Elimination of livestock grazing would remove the potential impacts by livestock to riparian areas including trampling, water displacement, sedimentation and nitrification and removal of vegetation. The probable increase in grass and forb availability would enhance habitat quality for aquatic wildlife.

WILDLIFE – TERRESTRIAL

Affected Environment: These allotments provide year round habitat for elk, mule deer, pronghorn antelope, black bear, mountain lion, a variety of small mammals, reptiles and song birds. The northern portion of the Lower Milk Creek Allotment and all of the Lower Taylor Creek Allotment are mapped as elk and mule deer severe winter habitat by the Colorado Division of Wildlife (CDOW). Both allotments are mapped as mule deer critical winter habitat by the CDOW. The rocky outcroppings and cliffs throughout the Lower Milk Creek allotment provide suitable nesting habitat for raptors.

Environmental Consequences, Alternative A – Proposed Action and Alternative B - No Action Alternative: Either of these alternatives would ensure that wildlife habitats remain capable of supporting healthy productive wildlife populations. The Proposed Action permits grazing to occur outside of the big game winter timing restrictions (December 1 – April 30). This timing would prevent impacts to big game winter range habitats in both allotments. Big game animals would not be directly impacted from livestock grazing. There is a potential that

ground nesting songbirds using these allotments could have nests destroyed by livestock. This is unlikely to occur frequently and would not have a negative impact on any species population. Livestock grazing would not have any impact on the raptor nests along the cliffs in the Lower Milk Creek allotment. The proposed livestock ponds would benefit wildlife by providing an additional water source.

Environmental Consequences, Alternative C - No Renewal Alternative: Under the No-Grazing Alternative, there would no longer be direct competition between livestock and wildlife for forage, browse and cover. Since livestock grazing would not be permitted, range improvement projects that benefit wildlife, such as water developments, would be abandoned. New range improvement projects that would benefit wildlife habitat may not be implemented because these projects are primarily driven and funded through range improvement efforts.

CUMULATIVE IMPACTS SUMMARY:

Cumulative impacts may result from the renewal of these livestock grazing permits when added to non-project impacts that result from past present and reasonably forseeable future actions.

Historically, these allotments and areas surrounding have been grazed by both sheep and cattle. It is not anticipated that land use, emphasizing agricultural practices, in any of the surrounding areas, public or private lands, would experience drastic changes outside of previous and or current use, or be abolished in the foreseeable future.

The Lower Taylor Creek Allotment is adjacent to a large active surface coal mine operation. The Lower Milk Creek Allotment is across the highway from the coal mine. This industry, along with additional oil and gas exploration and development, presents an impact to the area for wildlife and livestock management as well as other resources.

Wildlife populations in the area are high, especially for deer and elk that compete with livestock for available forage throughout the area. Agricultural and livestock management fences and mineral extraction contribute to habitat fragmentation for many wildlife species. The planned range improvement projects would provide mitigative measures benefitting wildlife.

Numerous maintained and unmaintained roads exist throughout the area, including on the allotments. These roads are used regularly by landowners as well as by the primary recreation users in the area, hunters. Public access to the allotments is somewhat limited resulting in only minimal use of existing roads and trails. In association with the expected signing and implementation of the Final Little Snake Resource Management Plan (RMP) a Travel Management Plan (TMP) would be completed within five years. This TMP will provide greater restrictions to OHV use compared to what is currently allowed. These restrictions would remove an additional impact in many areas, thus benefiting natural resources.

Energy and mineral development is currently authorized in many areas inside and outside the area of proposed action and some level of future developments will also occur. The allotments are adjacent to Colorado State Highway 13 which serves as a transportation and energy corridor.

Currently there are two proposed high voltage interstate transmission projects in which one proposed route is along the Colorado State Highway 13 corridor through these allotments.

Ranching and agriculture are the major economic drivers for the local community and surrounding region. Continuation of these practices would provide commerce, employment, and stability to many businesses, families and individuals who depend on agricultural practices for their livelihood. If Alternative C - No Renewal Alternative were to be chosen a small number of individuals and families would lose employment and would be forced to seek/or train for other employment, relocate, or rely on public assistance. If this type of no grazing on public land trend were to continue, denying applications and or cancelling other or all public land grazing authorizations, the economy of the region and many other associated industries would no longer be sustainable, thus causing a much larger and far reaching adverse economic and social impact. Currently, and in the foreseeable future, there is no industry, or economic venture that could replace agricultural practices in terms of employment, commerce, and tax based revenue.

There is a consensus in the international community that global climate change is occurring, although defined causal factors and prevention measures are still being debated. There is currently a lack of guidance on how to perform a climate change analysis under NEPA and thus it is appropriate to restrict this discussion to a qualitative review. Livestock grazing under Alternative A - Proposed Action and Alternative B – No Action Alternative would be at the same level as it has historically been, so it follows that methane and carbon dioxide production would stay the same. Therefore, under Alternative A - Proposed Action there would be no increased contribution to global climate change. Greenhouse gas production would presumably be further reduced under a no grazing scenario, although it is likely that at least some of the livestock that would have been grazed on this allotment would simply graze elsewhere.

Future use on adjacent private lands would likely continue to include livestock grazing as a primary use in addition to mineral development, recreational use and farming. When added to the existing activities in the project area, approval of this proposed action would not cause undue damage to natural resources.

Alternative A - Proposed Action and Alternative B – No Action Alternative continuing grazing on these allotments, is compatible with other uses, both historic, present, and future and would not add any new or detrimental impacts to those that are already present or will be cumulative in nature.

STANDARDS

Allotment	Assessment Date(s)	All Standards Met	Standard(s) Not Met	Current Livestock Management a Causal Factor	Management Actions
#4609 Lower Milk Creek	05/21/07 10/14/08	Yes	N/A	N/A	N/A
#4529 Lower Taylor Creek	10/14/08	Yes	N/A	N/A	N/A

All standards are being met on both allotments and would continue to be met with implementation of all alternatives. The sites that were assessed were representative of the allotments. Each assessment was completed by an interdisciplinary team consisting of combinations of Rangeland Management Specialists, Wildlife Biologists, a Natural Resource Specialist, and the grazing permittee. Detailed descriptions of the Land Health Assessments are available in the allotment files.

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office, Walt Proctor (JHL Limited Partnership).

ATTACHMENTS: Attachment #1 - Map
Attachment #2 - Standard and Common Terms and Conditions
Attachment #3 - Pond Construction Diagram

SIGNATURE OF PREPARER: /s/ *Christina Rhyne*

DATE SIGNED: *9/9/11*

SIGNATURE OF ENVIRONMENTAL REVIEWER: /s/ *Barbara A. Sterling*

DATE SIGNED: *9/9/11*

Finding of No Significant Impact
DOI-BLM-CO-N010-2011-0073-EA

Based upon a review of the EA and the supporting documents, I have determined that the Proposed Action is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity, as defined at 40 CFR 1508.27 and do not exceed those effects as described in the Little Snake Resource Management Plan and Record of Decision (1989). Therefore, an environmental impact statement is not required. This finding is based on the context and intensity of the project as described below.

Context:
The project is a site-specific action directly involving BLM administered public lands that do not in and of itself have international, national, regional, or state-wide importance. The grazing permittee, JHL Limited Partnership, has an active grazing authorization on the Lower Milk Creek Allotment #04609 and the Lower Taylor Creek Allotment #04529. This lease will expire on 2/28/2012. JHL Limited Partnership has applied for renewal of the grazing permit on the Lower Taylor Creek Allotment and White River Ranch Properties has applied for the transfer of the grazing preference and renewal of the permit on the Lower Milk Creek Allotment concurrent with their lease of the associated base property.

Intensity:
The following discussion is organized around the 10 Significance Criteria described at 40 CFR 1508.27. The following have been considered in evaluating intensity for this Proposed Action:

1. Impacts that may be both beneficial and adverse:
The beneficial effects of the Proposed Action includes: in authorizing public land grazing this action sustains the local economy as grazing operations would continue to supply personal income to the operator and employees, and would have a proportional influence on the regional, Colorado, and national economy. This action supports the western livestock industry. The authorized livestock operator(s) have mandatory and special terms and conditions that must be met to maintain their grazing preference. This provides a certain level of stewardship of public lands in that if these lands were to become degraded by any activity or event, natural or human in origin, grazing and or other authorized uses would be terminated. This stewardship role of the livestock operator not only mandates proper livestock and forage management but also provides communication with the BLM as to other activities or events that could cause degradation to public lands.

Adverse effects include minor impacts to soils and vegetation that will occur temporarily during construction of the proposed ponds. Long term effects would be limited in scope.

2. Degree of effect on public health and safety:
There would be no effect to public health and safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:
There are no park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas in the area of Proposed Action. As described in the EA, impacts to cultural resources were identified for the Proposed Action. As this action is not a new action but a continuation of historic land uses in this area there would be no effect to unique characteristics of the geographic area.

4. Degree to which the possible effects on the quality of the human environment are likely to be highly controversial:
Public input regarding the Proposed Action has been solicited during the planning process. The BLM Little Snake Field Office sent out a Notice of Public Scoping on December 17, 2007 to determine the level of public interest, concern, and resource conditions on the grazing authorizations that were up for renewal in FY 2009. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on permit/lease renewals. Individual letters were sent to the effected permittees/lessees, informing them their permit/lease was up for

renewal and requesting any information they wanted included in or taken into consideration during the renewal process. Permittee input was included in the alternatives. No additional comments were received.

5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risk.
No highly uncertain or unknown risks to the human environment were identified during analysis of the Proposed Action.

6. Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:
The Proposed Action neither establishes a precedent for future BLM actions with significant effects nor represents a decision in principle about a future consideration.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts:
No individually or cumulatively significant impacts were identified for the Proposed Action. Any adverse impacts identified for the Proposed Action, in conjunction with any adverse impacts of other past, present, or reasonably foreseeable future actions will result in negligible impacts to natural and cultural resources.

8. Degree to which the action may adversely affect district, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources:
There would be no loss or destruction to these resources.

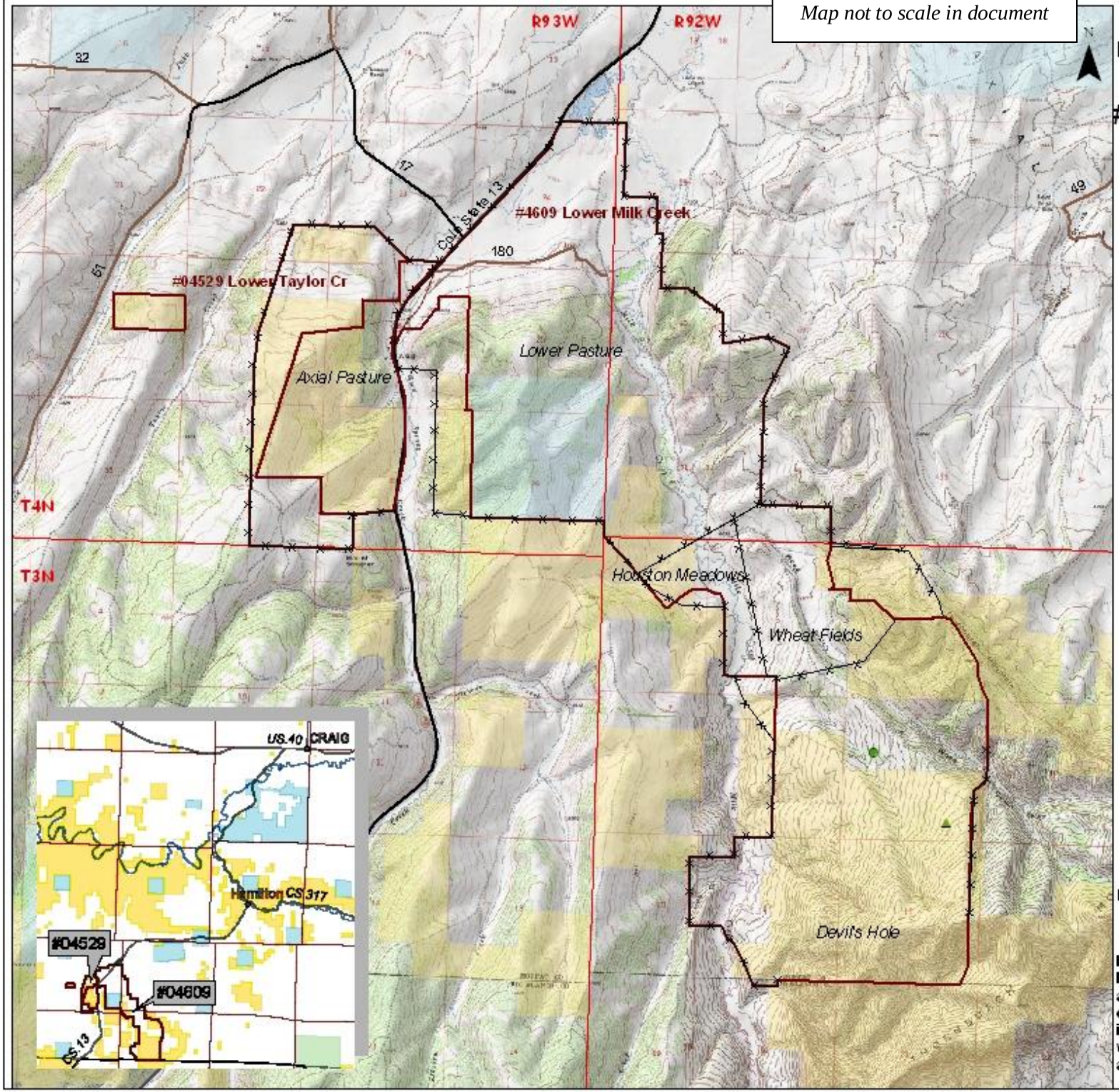
9. Degree to which the action may adversely affect an endangered or threatened species or its critical habitat:
There would be no loss or destruction to these resources.

10. Whether the action threatens a violation of federal, state, or local environmental protection law:
The Proposed Action violates no federal, state, or local environmental protection laws.

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ *Matt Anderson*

DATE SIGNED: *09/16/2011*

Map not to scale in document



Attachment #1
DOI-BLM-CO-N010-2011-0073-EA

#4609 Lower Milk Creek
#4529 Lower Taylor Creek

Wildlife planting proposal areas
- Completed 2010
- Planned
- Fencelines
- Allotment Boundary
- Pasture Boundaries

Surface Management Status
- Private
- State Land Board
- US BLM

#4609 Lower Milk Creek

Private	3,702 acres
State LB	634 acres
BLM	2,643 acres
Total	**6,979 acres**

#4529 Lower Taylor Creek

Private	374 acres
BLM	388 acres
Total	**762 acres**

Axial
Monument Butte
Ninemile Gap
Thornburgh

0 2,450 4,900 9,800 Feet

1:60,000

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregation use with other data. All boundaries are an approximate representation.

CR
4/11/11

ATTACHMENT #2
DOI-BLM-CO-N010-2011-0073-EA
TERMS AND CONDITIONS

Standard Terms and Conditions

1) Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.

2) They are subject to cancellation, in whole or in part, at any time because of:
   a. Noncompliance by the permittee/lessee with rules and regulations;
   b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based;
   c. A transfer of grazing preference by the permittee/lessee to another party;
   d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described;
   e. Repeated willful unauthorized grazing use;
   f. Loss of qualifications to hold a permit or lease.

3) They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits and leases when completed.

4) Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.

5) The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.

6) The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.

7) Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.

8) Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.

9) Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.

10) Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of $25 or 10 percent of the amount owed but not more than $250) will be assessed.

11) No member of, or Delegate to, Congress or Resident Commissioner, after his/her election of appointment, or either before or after he/she has qualified, and during his/her continuance in office, and no officer, agent, or employee of the Department of Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statute (41 U.S.C. 22), 18 U.S.C. Sections 431-433, and 43 CFR Part 7, enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

Common Terms and Conditions

A) Grazing use will not be authorized in excess of the amount of specified grazing use (AUM number) for each allotment. Numbers of livestock annually authorized in the allotment(s) may be more or less than the number listed on the permit/lease within the grazing use periods as long as the amount of specified grazing use is not exceeded.

B) Unless there is a specific term and condition addressing utilization, the intensity of grazing use will insure that no more than 50% of the key grass species and 40% of the key browse species current years growth, by weight, is utilized at the end of the grazing season for winter allotments and the end of the growing season for allotments used during the growing season. Application of this term needs to recognize recurring livestock management that includes opportunity for regrowth, opportunity for spring growth prior to grazing, or growing season deferment.

C) Failure to maintain range improvements to BLM standards in accordance with signed cooperative agreements and/or range improvement permits may result in the suspension of the annual grazing authorization, cancellation of the cooperative agreement or range improvement permit, and/or the eventual cancellation of this permit/lease.

D) Storing or feeding supplemental forage on public lands other than salt or minerals must have prior approval. Forage to be fed or stored on public lands must be certified noxious weed-free. Salt and/or other mineral supplements shall be placed at least one-quarter mile from water sources or in such a manner as to promote even livestock distribution in the allotment or pasture.

E) Pursuant to 43 CFR 10.4(g), the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of

human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

The operator is responsible for informing all persons who are associated with the allotment operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any allotment activities or grazing activities, the operator is to immediately stop activities in the immediate vicinity and immediately contact the authorized officer. Within five working days the authorized officer will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places;
-the mitigation measures the operator will likely have to undertake before the identified area can be used for grazing activities again.

If paleontological materials (fossils) are uncovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials and contact the authorized officer. The operator and the authorized officer will consult and determine the best options for avoiding or mitigating paleontological site damage.

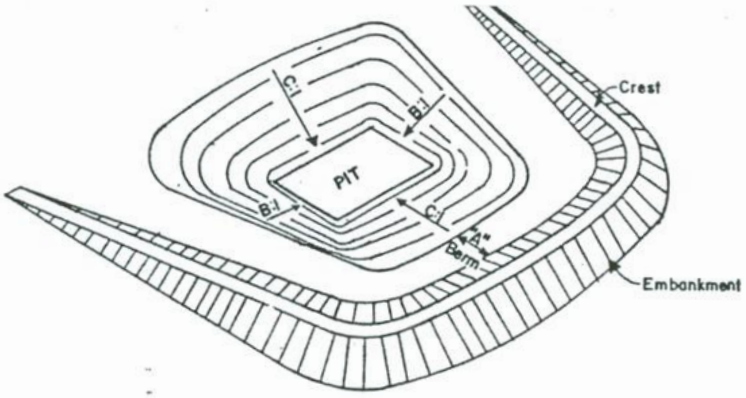
F) No hazardous materials/hazardous or solid waste/trash shall be disposed of on public lands. If a release does occur, it shall immediately be reported to this office at (970) 826-5000.

G) The permittee/lessee shall provide reasonable administrative access across private and leased lands to the BLM and its agents for the orderly management and protection of public lands.

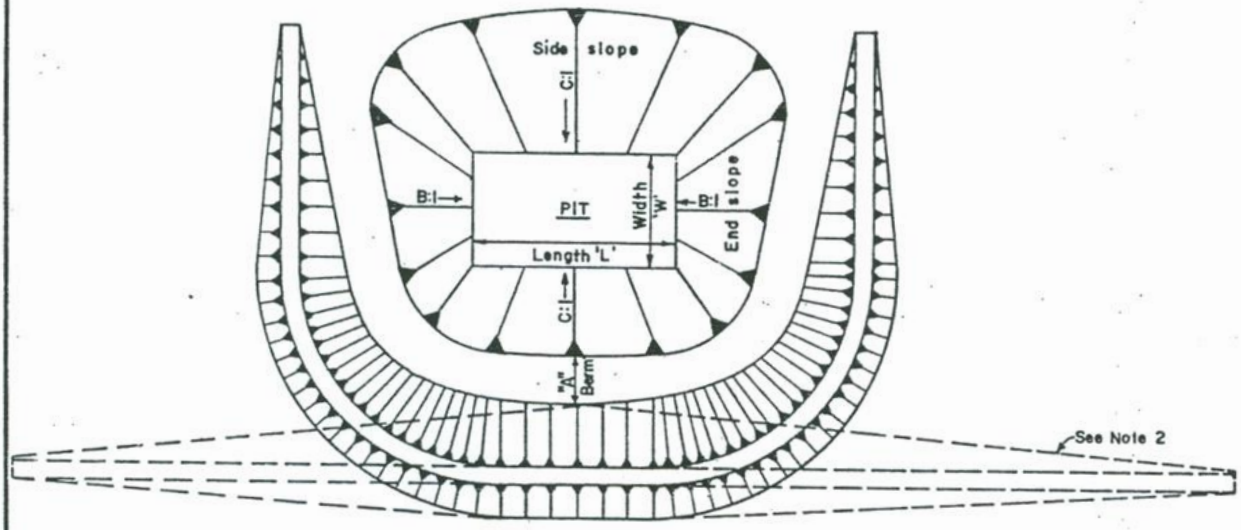
H) Application of a chemical or release of pathogens or insects on public lands must be approved by the authorized officer.

The terms and conditions of this permit/lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

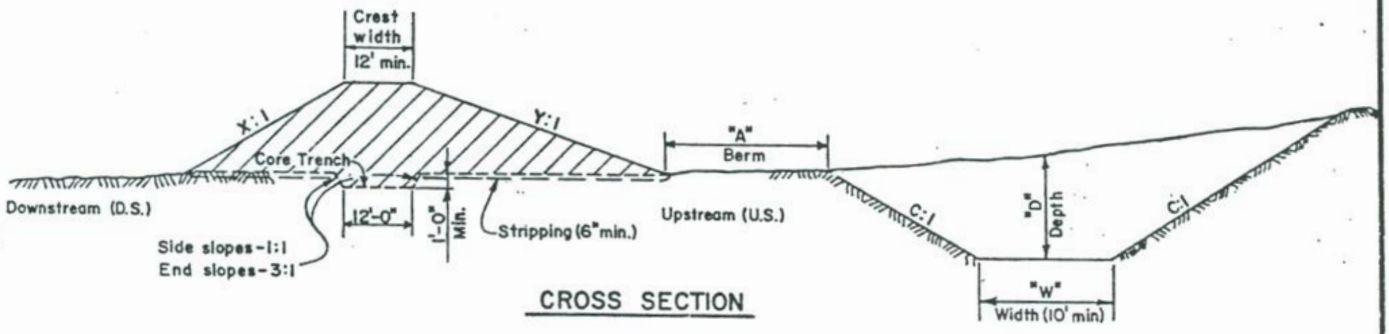
ATTACHMENT #3
DOI-BLM-CO-N010-2011-0073-EA



PERSPECTIVE VIEW



PLAN



CROSS SECTION

NOTES:

1. Pit & embankment slopes & dimensions shall be as shown on the Work Summary Chart.
2. Embankment may be "U" Or "L" shape or straight line. Construct as indicated on the Work Summary Chart.

ALWAYS THINK SAFETY

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	
DIVISION OF ENGINEERING SYSTEMS	DENVER SERVICE CENTER
TYPICAL WATER RETENTION PIT	
DESIGNED Ronald C. Wolf	
REVIEWED [illegible]	
APPROVED Richard L. Engel	
DRAWN J.D. Sedillo	SCALE NONE
DATE MARCH 9, 1984	SHEET OF
DRAWING NO. 02294-1	